



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/021,249

12/19/2001

Eyal Trachtman

1487.0330000/DKSC/DRB

7208

26111

7590

10/05/2006

STERNE, KESSLER, GOLDSTEIN & FOX PLLC
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

RAMAKRISHNAIAH, MELUR

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary
for Applications
Under Accelerated Examination**

Application No.

10/021,249

Applicant(s)

TRACHTMAN ET AL.

Examiner

Melur Ramakrishnaiah

Art Unit

2614

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Since this application has been granted special status under the accelerated examination program,
NO extensions of time under 37 CFR 1.136(a) will be permitted and a SHORTENED STATUTORY PERIOD FOR
REPLY IS SET TO EXPIRE:**

**ONE MONTH OR THIRTY (30) DAYS, WHICHEVER IS LONGER,
FROM THE MAILING DATE OF THIS COMMUNICATION -- if this is a non-final action or a Quayle action.
(Examiner: For FINAL actions, please use PTOL-326.)**

The objective of the accelerated examination program is to complete the examination of an application within twelve months from the filing date of the application. Any reply must be filed electronically via EFS-Web so that the papers will be expeditiously processed and considered. If the reply is not filed electronically via EFS-Web, the final disposition of the application may occur later than twelve months from the filing of the application.

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
2) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 3) ☒ Claim(s) 1,3-21,23 and 24 is/are pending in the application.
3a) Of the above claim(s) _____ is/are withdrawn from consideration.
4) ☐ Claim(s) _____ is/are allowed.
5) ☒ Claim(s) 1,3-21,23 and 24 is/are rejected.
6) ☐ Claim(s) _____ is/are objected to.
7) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 8) ☐ The specification is objected to by the Examiner.
9) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
10) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 11) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4-22-04/5-29-04
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-10, 11-19, 20-21, 23-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell (US PAT: 6,741,841, filed 1-28-2000) in view of Otten (US PAT: 6,522,865, filed 4-10-1999).

Regarding claim 1, Mitchell discloses apparatus for receiving signals transmitted by satellite including: an antenna (411, fig. 13) for receiving signals, a demodulator in (264, fig. 11) connected to the antenna, for demodulating one or more communication channels among the signals (col. 23 lines 28-34), and a broadcast demodulator in (450, fig. 13), separate from the communications demodulator and connected to the antenna for demodulating one or more broadcast channels among the signals (col. 25 lines 11-27), wherein one or more communication channels are separate in frequency from the broadcast channels, and apparatus further including a frequency splitter (460, fig. 1) for the communication channels and the broadcast channels, directing the separated communications channels to the communications demodulator, and directing the separated broadcast channels to the broadcast demodulator (col. 25 lines 57-66).

Regarding claim 11, Mitchell discloses a system for providing broadcasts to aircraft comprising: transmitting means broadcast signals in a broadcast channel to an

Art Unit: 2614

aircraft, receiving means (411, fig. 13) receiving the broadcast signals on aircraft and decoding means (reads on splitter 460, fig. 13) decoding the broadcast signals, in which the transmitting means and receiving means additionally transmit and receive communication signals in a separate channel, wherein decoding means further acts to direct broadcast signals and separated communication signals to a broadcast signal demodulator (col. 25 lines 11-26) and a communication signals demodulator (col. 23 lines 28-34, col. 25 lines 57-66).

Regarding claim 20, Mitchell discloses an apparatus for receiving real-time broadcast on aircraft, the apparatus comprising: decoding means for separating broadcast data from other data contained within a signal received on-board the aircraft, in which broadcast data comprises a signal allocated a frequency sub-band separate from the frequency sub-band allocated to the signal comprising the other data, wherein the decoding means (reads on splitter 460, fig. 13, col. 25 lines 57-66) is operable to process data relating to the broadcast from the other data by the splitting the signal received on board the aircraft into signals in the respective frequency sub-bands, and decoding means is further operable to direct signals in respective frequency sub-bands to respective demodulator (col. 23 lines 28-34; col. 25 lines 11-27).

Regarding claim 21, Mitchell discloses a method of providing real-time broadcasts to aircraft comprising the steps of: transmitting a signal via a satellite (for example 418, fig. 13; 240, fig. 11), to an aircraft, the signals including communications data and broadcast data, wherein the communication data is separate in frequency from the broadcast data, receiving the signals on board the aircraft, processing the separated

Art Unit: 2614

broadcast data so as to distribute the broadcast on board the aircraft (col. 23 lines 28-34; col. 25 lines 11-27).

Mitchell differs from claimed invention in that although he discloses decoding means such as splitter (460, col. 25 lines 57-66), he does not specifically teach decoding means such as splitter for separating the communication channels and the broadcast channels.

However, Otten discloses a hybrid satellite communication system which teaches the following: decoding means such as splitter for separating the communication channels and the broadcast channels (fig. 6, col. 8 lines 6-14).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mitchell's system to provide for the following: decoding means such as splitter for separating the separating the communication channels and the broadcast channels as this arrangement would facilitate to separate the signals so that they can be further processed in separate devices as taught by Otten.

Regarding claims 3-10, 11-19, 23-24, Mitchell further teaches the following: antenna is a directional antenna, the apparatus including means for steering the antenna to point towards a signal source according to a property of one or more communication channels demodulated by the communication demodulator, property is signal strength of the one or communication channels (col. 24 lines 55-64), communication modulator (274, fig. 12) connected to the antenna for receiving and modulating communication signals received from one or more communication terminals (for example 272, fig. 11) and transmitting modulated communication signals through

Art Unit: 2614

the antenna (col. 24 lines 25-39), at least one of the communication terminals is broadcast control terminal for transmitting broadcast control signals so as to control content of the broadcast channels (col. 25 lines 43-56), decoding the one or more communication channels and distributing the decoded communication channels to the one or more communication terminals (col. 23 lines 28-34), decoding the demodulated one or more broadcast channels and distributing the one or more broadcast channels to one or more broadcast servers (col. 15 lines 1-26), antenna is (261, fig. 12; 411, fig. 13) is a satellite communication antenna, an aircraft including apparatus according to claim 1 (figs. 11-13), broadcast channel is capable of multiplexing one or more broadcast programs and control information, broadcast programs include one or more real time television broadcasts, internet broadcasts, real time audio broadcasts, multimedia broadcasts, internet broadcasts, recorded television and audio broadcasts (col. 25 lines 11-56; fig. 9), broadcast channels are allocated a radio frequency sub-band which is separate from the radio frequency sub-band allocated to the communication channels (col. 25 lines 57-66; col. 23 lines 28-34; col. 25 lines 21-27), receiving means comprises an antenna which is steerable and transmitting means is a satellite forming part of a constellation of satellites (col. 25 lines 1-10 and fig. 3), communication subsystem for receiving and transmitting communications signals in the communication channels, the communication subsystem including control means for controlling antenna, control means is operable to move the antenna to point at a predetermined satellite, (col. 24, line 55 – col. 25, line 10), control means is further operable to switch between satellites when aircraft passes from one satellite coverage area to another (col. 4, line

62-col. 5, line 6), broadcast subsystem is separate from the communication subsystem and in which the broadcast subsystem processes the signal received from decoding means and relays the signal to reproduction means for reproducing signals on the aircraft, means for decoding the one or more communication channels and distributing the decoded communication channels to the one or more terminals (col. 25 lines 57-66; col. 23 lines 28-34; col. 25 lines 43-56).

Response to Arguments

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

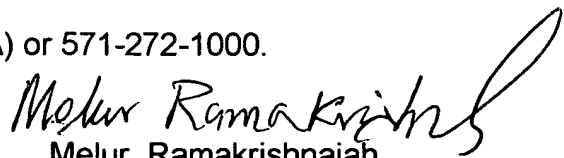
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

Art Unit: 2614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Melur Ramakrishnaiah
Primary Examiner
Art Unit 2614